

WHAT IS CLAIMED IS:

1. A fabrication method of semiconductor device comprising a step of forming an electroconductive material film on a substrate, a step of polishing the electroconductive material film, and a step of washing a polished surface of said electroconductive material film,
5 wherein said washing step is a step of carrying out ultrasonic washing with a washing solution to which
10 an ultrasonic wave is applied, prior to physical washing.
2. A fabrication method of semiconductor device according to Claim 1, wherein said polishing step is carried out by use of CMP (Chemical Mechanical
15 Polishing).
3. A fabrication method of semiconductor device according to Claim 1, wherein said ultrasonic washing
20 is carried out in a frequency band of not less than 800 kHz.
4. A fabrication method of semiconductor device according to Claim 3, wherein said frequency band is a
25 range of 1 MHz to 3 MHz both inclusive.
5. A fabrication method of semiconductor device

according to Claim 1, wherein said ultrasonic washing
is carried out while said washing solution is
discharged from a nozzle.

5 6. A fabrication method of semiconductor device
according to Claim 1, wherein said ultrasonic washing
is carried out while the substrate with said polished
surface thereon is rotated at 1000-2500 rpm.

10 7. A fabrication method of semiconductor device
according to Claim 1, wherein said physical washing is
selected from brush scrubbing and high-pressure jet
washing.

15 8. A fabrication method of semiconductor device
according to Claim 7, wherein said brush scrubbing is
carried out using either a mohair brush or a sponge
brush.

20 9. A fabrication method of semiconductor device
according to Claim 8, wherein PVA (polyvinyl alcohol)
is used for said sponge.

25 10. A fabrication method of semiconductor device
according to Claim 1, wherein ultrasonic washing is
again carried out after said physical washing.

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